



This was determined after research data obtained from 45 African countries from the World Health Organization (WHO), the World Bank, the United Nations Children's Fund (UNICEF) and the United Nations Development Programme (UNDP) were studied.

Despite the significant differences between countries, the number of maternal deaths was high in all of them, at an average of 885 deaths for each 100,000 births, but these women are not dying as a result of any disease, but just from normal biological processes.

The main causes of death are hemorrhages, infections, pre-eclampsia and obstruction during birth. There are also indirect causes, although they are no complications relating to the birth itself, but they become worse over the course of the pregnancy and cause 20% of the deaths.

The results of this study show that an effective and efficient health system, especially during pregnancy and birth, are fundamental cornerstones of maternal health,

along with access to clean drinking water.

According to the World Health Organization, an estimated 13,000 women die each year in Tanzania due to labor and pregnancy-related complications, and more than a quarter million more suffer disabling conditions. Transportation is spotty and health-care facilities are often miles away from local communities, making it extremely difficult for women which experience pregnancy complications - which can include severe hemorrhage, infections, anemia and obstructed labor—to access skilled health care.

Lack of access to obstetric care is one of the major obstacles worldwide in reaching Millennium Development Goal № 5 to reduce maternal deaths by three-quarters - a mark set forth by the international community in 2000. As the deadline looms for achieving that goal—2015—many agree it's a deadline, to which Tanzania is unlikely to meet.

UDK:616-057.87:376.68:378.4(477.85)

U.K. Gbaruko, N.O. Slyvka, A.O. Eriofoloh, E. Amoah

CHANGE IN THE USUAL ENVIRONMENT AND HEALTH CONDITION - IS THERE A CONNECTION?

Department of patients care
(scientific adviser - prof. I.A. Plesh)

Bukovinian State Medical University, Chernivtsi, Ukraine

Introduction. This research deduces the ravaging courses and kind of diseases in foreign students and the effect of diet & climatic condition towards its enhancement. This study shows the influence on self reported health of foreign students.

Aim. The aim of this study is to evaluate the self reported health of foreign students of Bukovinian State Medical University Chernivtsi, considering changes of their usual environment.

Materials & methods. A random sample of fifty (50) foreign students of Bukovinian State Medical University (from Nigeria, Ghana, Nepal, India, Libya, Congo, Djibouti, Somalia) ranging from ages 18 – 28, were interviewed in September, October & November 2011 about their health condition. In successive models starting with only disease type and its dominance, one variable at a time was included in the two main models, one with climatic and economic factors and another with lifestyle factors as independent variables, in order to study how the importance of change in diet induces deterioration of health among foreign students. The students were told to specify the most affected part of the body, intensity of symptoms & general health evaluation from 1-5 according to the questionnaire.

Results. Afterwards the interviewed the following data were obtained: 25 students have suffered from gastrointestinal tract disorder (GIT), 15 students, have suffered from respiratory tract disease, while other students were grouped among others, for example students that suffered from diseases like osteochondrosis, urinary tract infection and tonsillitis.

From analysis we observed the drastic change in the relations between students who suffered from GIT disorder, respiratory infections, kidney infections and other kinds of diseases (osteochondrosis, urinary tract infection, tonsillitis) as a large variable owing to the fact that 60% of student from the University suffer from GIT related disorders, 25% - from respiratory diseases, 14% - from kidney infections, setting aside 11% for other form of diseases as observed.

Conclusion. Due to information obtained, we can conclude that gastrointestinal tract disorder is the most common disease among foreign students, and this could be as a result of poor diet & starvation, we recommend factors that can help reduce the risk of disease e.g regular diet, proper usage of local products, physical exercise & active social life.

UDK: 616.12-008.331.1-08

Meenu Gupta, Chintvan Vyas

THE USE OF AMLODIPINE AND REGIONAL MYOCARDIAL CONTRACTILITY

Department of internal medicine, physical rehabilitation and sport medicine
(scientific advisers – as. prof. P.R. Ivanchuk, as. prof. N.A. Turubarova-Leunova)

Bukovinian State Medical University, Chernivtsi, Ukraine

In order to determinate the efficiency of amlodipine's influence on the capability of the left ventricular (LV) myocardium contractility, 40 patients were examined after the dynamic contractility of the left ventricle

myocardium was tested. Patients were examined during the acute period of the amlodipine test and under the background of 10 days of treatment. Clinical effect of amlodipine is related to the blood pressure stabilization.



In average on 3rd day of treatment, amlodipine lead to systolic blood pressure decrease up to 24,7% ($p<0.05$) and diastolic blood pressure decrease up to 24,2% ($p<0.05$). Echocardiography at that point failed to show any substantial dynamics of the volume indexes and the general ejection fraction (GEF). On the other hand analyses of the regional ejection fraction (REF) testify, that the use of amlodipine, already during the acute period of testing, lead to it's improvement, the changes were authentic for REF8 ($p<0.05$), in other regions of the left ventricle, increase myocardial contractility tendencies were noted. Initial parameters of the regional contractility in terms of the 10 days amlodipine treatment, regional contractility profile changing tendencies was characterized with decrease for the REF3-5 and increase of the REF1-2, REF6-12, changes for REF1 were authentic ($p<0.05$). At the height of the recurring amlodipine test, compared to the initial amlodipine test, similar change tendencies were registered along with the increase of the initial REF1-2 and REF6-12 in view of REF3-5 decrease. Thus, it is defined that amlodipine, even in a short treatment term, possesses positive influence on the regional contractility.

As results testify, the uses of amlodipine already in the acute test phase lead to improvement of REF, which

was authentic for REF8 ($p<0.05$), in other parts of left ventricle a decrease tendency of regional myocardial contractility was observed. Initial parameters of regional coronary contractility in terms of 10 days treatment with amlodipine was characterized as having a tendency of changing the profile of regional myocardial contractility with decrease for the REF3-5 and increase in REF1-2, REF6-12, changes for REF1 was authentic ($p<0.05$). On the height of recurring investigation with the prescription of amlodipine compared with the first investigation, tendency to similar changes with the increase of initial REF1-2 and REF6-12 having decrease in REF3-5.

The held investigation testifies, that in all patients with arterial hypertension which used amlodipine as anti-hypertensive treatment, reached stable effects, which was related to the stabilization of arterial hypertension. Analyses of REF testified in favor of its favorable changes both in the acute medication phase and in the 10 days treatment with the normalization of profile of left ventricle contractility and decrease of hyperfunction with reverse influence on hyperfunctional myocardial regions at rest and tendency to increase on height of acute medication test.

UDK : 618.1-054.2/.8

Jakub Kubias

THE USE OF STEREOTACTIC METHODS IN NEUROSURGERY – COMPARATIVE STUDY

Department of neurosurgery
(scientific adviser - M.D., PhD. David Krahulik,)

Palacký University Olomouc, the Czech Republic

Introduction: Stereotaxy (from the Greek „stereo“ – spatial and „taxis“ – arrangement) refers to a group of neurosurgical methods used for diagnostic or therapeutic purposes performed on structures of the central nervous system that cannot be seen directly during the procedure. There are two types of stereotaxy – the frame-based and the frameless.

The frame-based stereotaxy is based on a rigid fixation of a Leksell-type stereotactic frame directly to a skull with the help of pins. Part of this device consists of a stereotactic ring with coordinates. Before the procedure, the patient with the frame tightly fixed on his head is sent to MRI (magnetic resonance imaging) where the image of the relation skull – frame is taken. After that, an image is screened on the computer and the coordinates of the point of invasion on the skull and the aim coordinates are measured, referred to the (0,0,0) point of the frame meaning the center of the head. As far as the coordinates are known, we calculate the 3D equation of the trajectory for our approach. As soon as the coordinates are stated on the frame, we can perform a trepanation and insert a tool into the patient's head.

The frameless method uses the preoperational image of the patient's head even during the procedure. It allows the imaging of the relation of the tool to the focus in the patient's brain directly showing both on the screen of the

frameless device helping the surgeon in better orientation. There is no need of a firm fixation of a stereotactic frame and furthermore, there are several principles the frameless device may work on. Our clinic is using Stealthstation 7 from the Medtronic company.

Method: The comparison of the frame-based and the frameless stereotaxy in the means of indications, accuracy, financial matters and usage in DBS (deep brain stimulation). In my study, I am mentioning as well the pros and cons of the contemporary neuronavigation and its probable future development. All the information is based on our own experience and is related to certain studies from pubmed.com.

Results: The frame-based method showed to be more accurate and cheaper but the operations usually take longer time and the frame causes discomfort to the patient. Frameless navigation showed to be more expensive, big disadvantage is the phenomenon called „the brain shift“, but shows better results in the patient's comfort and a big advantage in the preoperational navigation

Conclusion: Each of the methods should be used for specific purposes, very important is the own experience of a concrete department, thus should be the use of navigational methods in neurosurgery assessed individually.

